R E P O R T R E S U M E S

ED 019 897 FL 000 545

A SYSTEM FOR TEACHING MODERN FOREIGN LANGUAGE READING.
TEACHER'S NOTEBOOK IN MODERN FOREIGN LANGUAGES.
BY- SCHERER, GEORGE A.C.

PUB DATE 64

EDRS PRICE MF-$0.25 HC-$0.68 15P.

DESCRIPTORS- *LANGUAGE INSTRUCTION, *SECONDARY SCHOOLS, *READING INSTRUCTION, *AUDIOLINGUAL METHODS, *PROGRAMED INSTRUCTION, TEACHING TECHNIQUES, MODERN LANGUAGES, PROGRAMING, READABILITY, VOCABULARY DEVELOPMENT, LISTENING SKILLS, SPEECH SKILLS, READING MATERIAL SELECTION, READING SKILLS, READING DEVELOPMENT, LANGUAGE SKILLS,

A SYSTEM OF PROGRAMED INSTRUCTION UTILIZING THE AUDIOLINGUAL APPROACH CAN ENABLE THE STUDENT TO ACHIEVE REAL READING ABILITY IN THE TARGET LANGUAGE, AS OPPOSED TO LIMITED TRANSLATION ABILITY. SUCH A CAREFULLY STRUCTURED PROGRAM, WITH CLEARLY SPECIFIED TERMINAL BEHAVIOR, STEP-BY-STEP ORGANIZATION, AND THE FACILITY FOR SELF-TESTING, ALLOWS THE STUDENT TO MASTER THE PHONETIC PATTERNS OF THE LANGUAGE, EXPAND HIS VOCABULARY TO 5,000 WORDS, AND DEVELOP AUTOMATIC COMPREHENSION. THE GAP BETWEEN CONTRIVED AND LIBERATED READING CAN BE BRIDGED IN A FOUR-YEAR HIGH SCHOOL SEQUENCE, DIVIDED INTO SIX STAGES, THE LAST OF WHICH IS THE READING OF UNADAPTED, UNGLOSSED LITERARY WORKS WITH DIRECT ASSOCIATION. (AR)

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Teacher's Notebook

in Modern Foreign Languages Spring 1964

A System for Teaching Modern Foreign Language Reading

BY GEORGE A. C. SCHERER

PUBLISHED BY HARCOURT, BRACE & WORLD SCHOOL DEPARTMENT

FL 000 545

Of the four basic modern foreign language skills — listening, speaking, reading, writing — the first two have been the subject of numerous papers in recent years. A less extensive contemporary professional literature exists as yet with regard to the two latter areas. For this reason, Harcourt, Brace & World is especially pleased to present this Teacher's Notebook — "A System for Teaching Modern Foreign Language Reading" — and hopes to present later a similar piece reflecting the newest research and experiments in the field of writing.

The qualifications of George A. C. Scherer, the author of this Notebook, are most impressive. Currently Professor of Modern Languages at the University of Colorado, where he has taught since 1946, Dr. Scherer has had a rich teaching experience in various public schools and colleges. In the forefront of the revolution in modern foreign language instruction, he serves as Consultant for the U.S. Office of Education, for the Modern Language Association, and for the Modern Language Materials Development Center (whose staff is responsible for the A-LM programs, published by Harcourt, Brace & World). Dr. Scherer is author or coauthor of several foreign language textbooks for schools and colleges, is a frequent contributor of articles to professional journals, and has served as Director of University of Colorado NDEA Language Institutes since 1959. He was Chairman of the 1963 Northeast Conference Working Committee on "Reading for Meaning."

The School Department Research Division of Harcourt, Brace & World publishes the Teacher's Notebook in Modern Foreign Languages to give articles of interest a wide circulation within the profession. Comments and suggestions are invited.

SCHOOL DEPARTMENT RESEARCH DIVISION

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A System for Teaching Modern Foreign Language Reading

by George A. C. Scherer

The rapidly growing enthusiasm for the audio-lingual approach to foreign-language teaching, together with the dramatic expansion of language sequences in our schools, have made it imperative that the teaching of reading be subjected to very close scrutiny. Those of us who are convinced of the superiority of an audio-lingual beginning in foreign-language teaching are not content simply to train illiterate polyglots. We must now exploit to the utmost the advantages of an audio-lingual beginning in the development of real reading ability as opposed to some sort of deciphering process. It is the purpose of this presentation to investigate some possibilities for building up a reading program in a systematic way, so that at the end of a four-year high school sequence the students will be prepared to read unabridged, unadapted, and unglossed modern literary works of moderate difficulty.[1]

PREREQUISITES

The audio-lingual approach to second-language teaching provides our students with two indispensable prerequisites for the development of real reading power. The first of these is the mastery of the sound system. It is the contention here that real reading, whether silent or aloud, implies reading with the appropriate melody of the language – the proper tone, color, rhythm, music. We need only think of the reading of poetry in order to realize how important this is. A poem read with a distorted phonetic melody is no longer the author's creation. This is also true of superior prose. In fact, only in connection with the reading of scientific literature in the search for pure information could it perhaps be argued that the appropriate phonetic melody of the language is of little importance.

The assertion that the appropriate phonetic melody is important even in silent reading is supported by the theory of inner speech. Recent research has all but proven the validity of this theory, and it appears that it is quite safe now to assume its tenets. Everything, or almost everything, we read or think is verbalized innerly, in terms of what psychologists call silent or incipient speech. We can draw an analogy with the radio that is perfectly tuned

[1] Some of the ideas in this paper have also been explored recently in the Report of the Working Committee on "Reading for Meaning" of the *1963 Northeast Conference on the Teaching of Foreign Languages:* George A. C. Scherer (Chairman), Delvin Covey, Sharon Entwistle, Alfred S. Hayes, Wallace E. Lambert, Dean H. Obrecht, Betty Robertson.

but whose volume setting is so low that the message is inaudible. Inasmuch as the incipient articulatory movements for the actual speech sounds do, however, attend this silent speech, we can see how important it is to have full phonetic control of the language even for silent reading if complete appreciation of the author's style is our goal (*Edfeldt, 1960; Sokolov, 1960*).

The second indispensable prerequisite to the development of true reading power is the automatic and direct understanding of the structural patterns of the language from seeing their written representations. Again, the audio-lingual approach can provide the student with precisely this competence. After meaning is established, English is gradually banished from the student's mind by overlearning. Thus when the reading of already overlearned audio-lingual material begins, the bond between the marks on paper (symbols) and the objects and concepts they represent (referents) is well established. The student then does not have to read indirectly, with mental translation into English, before the message has meaning. Direct association makes for faster reading because mental translation, even at so-called lightning speed, is a handicap. But even more important is the fact that full cultural meaning can never be achieved if the symbols from the first culture are used as the vehicles of meaning for the second, for the semantic range of the symbols of one language are never really equivalent to those of another. Our goal is to enable students to understand, to think, to speak, to read, and to write in each language without reference to the other *(Lambert, 1961)*.

A SYSTEMATIC APPROACH

Once we are satisfied that the student controls the total phonetic melody and a substantial number of the patterns of the second language, the problem of teaching reading is two-pronged: (1) The remainder of the basic patterns must be introduced and drilled to the point of automatic comprehension with direct association; and (2) the vocabulary must be expanded to include at least 5000 of the most frequent words in the language to be recognized for their meaning with direct association. Ideally this is not too different from learning to read the native language, except that already acquired literacy in the mother tongue means that the early steps, such as learning to recognize the alphabet and a great variety of combinations of the individual letters, can be by-passed. At least this holds if we are dealing with a second language that employs the same alphabet as the first.

How, then, is this goal of reading with direct association to be achieved? It can be done by making use of one of the current psychological theories concerning the process of learning. "Programed instruction" and "teaching machine" are terms with which teachers in every field are becoming familiar. Very often they imply the use of elaborate and expensive equipment. But programed instruction need not depend upon machines; the principles of programed instruction can readily be applied to the construction of language courses so that the book, in effect, becomes the "teaching machine."

The requirements of programed instruction are simple and logical: (1) the desired "terminal behavior" must be clearly specified; (2) the material must be organized and presented so that progress is made by a sequence of small steps, each one made easier by the mastery of the last one; and (3) the student must have the opportunity to test himself at every step in the program.[2]

Terminal Behavior Now let us see how these requirements for programed instruction can be met in a foreign language reading program. The first one calls for a specification of the desired terminal behavior, that is, the skills, the knowledge, and the response ten-

[2] The wording is approximately that of John B. Carroll, psychologist, Harvard University. See Bibliography.

dencies that we wish to produce. Reading with direct association between word and concept, with eventual liberation from especially constructed and glossed material, is the terminal behavior which we wish to attain. This assumes the ability to recognize automatically at least 5000 words of high frequency and the ability to recognize automatically the basic grammatical structure of the language. If the student has *active* control of some or all of the vocabulary and grammar, so much the better.

Let us deal with the vocabulary problem first. The number of words needed is based on current experience with a team of textbook writers. It is now reasonably, though not yet absolutely, clear that about 5000 words will liberate the student. The choice of the words to be taught is not so clear. Ideally it should be based on massive frequency counts of both the spoken and written language of the most modern times. (The reason for the emphasis on modern forms for our purposes will be discussed later.) Unfortunately, modern frequency lists of sufficient length – that is, covering 5000 or more words – are not yet available in most of the languages that concern us primarily, although some progress is being made here and there. In the meantime, we have no choice except to resort to the outdated and truncated older lists and to apply common sense in our selection of the valid terms and in the elimination of what has by now become uncommon. This is not an easy task because even the native speakers cannot be sure of the relative frequency of the words they use.

In dealing with the issue of the lexical volume that should be known before liberated reading can take place, it would be helpful to have an unchallengeable definition of the concept "'word." Although we cannot digress here to explore attempts to define it, perhaps we can at least suggest another approach which will suffice for a pedagogy of reading. For our purposes it will help to focus on a definition of what a *new* word is: It is any lexical unit – that is, any word or expression – which is likely to cause the student to stop reading because adequate meaning is not immediately apparent. Of course, what is new and therefore a reading stoppage for one student may not be one for another, even though both have had exactly the same course of study. One student may readily grasp the meaning of a derived form while the other does not. For the first it is a known word; for the second it is an unknown word. The same thing applies to inferential possibilities: the first student may have trouble, while the second does not. In all of this, judgments as to what is likely to constitute a reading stoppage for the majority of students have to be exercised by the authors. Each such predicted stoppage must be counted as new and must therefore be glossed.

I have mentioned that at least an automatic passive control of all of the grammatical elements is necessarily a part of the terminal behavior we wish to achieve, but that it is even better if some of the control is active as well. Since listening-speaking skill should be the fundamental axis of the entire language sequence, it seems efficient to separate the morphological and syntactical phenomena that are useful in everyday speech from those that are almost never employed by native speakers. Then each group of elements can be taught in a different way. The spoken patterns can be presented and drilled for active control, whereas those that are rarely heard except in formal lectures can be presented for automatic recognition only in reading and listening.

In specifying the terminal behavior required for liberated reading, I have tried to indicate that there are some difficulties, but I should also like to express the confidence that the main problems are being solved. Most of the problems still to be solved are in the area of the lexical inventory. The grammatical load is fairly obvious in terms both of its nature and its quantity. The native speakers can readily distinguish between the structures that are useful for speaking and those that need be taught passively only. It is fortunate indeed that the total number of structures is rather limited and therefore quite manageable. By comparison, the lexical inventory seems infinite.

Step-by-Step Organization The second requirement for programed instruction, namely, that the material must be organized and presented in a carefully designed progression of steps of appropriate size, can also be met in teaching second-language reading. This is accomplished by introducing the new lexical and grammatical units at regular, evenly-spaced, and manageable intervals. The following five basic guidelines are suggested as a means of fulfilling this requirement as far as the vocabularly is concerned:

1. The density of new words should not exceed one new word in about every 35 running words or in every three of four lines of text in which everything else is known or too obvious to gloss. This careful spacing is essential if the habits of direct association which have been built up by the audio-lingual work are to be maintained. It is a formula which is based in part on the experiments of Michael West in the 1920's *(West, 1926 and 1927)*. West, who was teaching English to Bengali students in India, discovered that one new word in every 50 running words was the most rapid introduction one could employ and still maintain the direct bond. But West was teaching English to speakers of a vastly different language. In the teaching of a second language more closely related to the first, the recognition problem is considerably simplified.

More recently the one-in-thirty-five formula was put to a test at the University of Colorado in a large-scale, highly controlled experiment comparing a traditional and an audio-lingual approach to the teaching of German *(Scherer and Wertheimer, 1964)*. The formula of one new word in every 35 running words was applied in all of the readings for the audio-lingual classes. A variety of tests designed to assess the degree of direct association revealed that the experimental group had far better habits in this area than the matched control group. It is highly unlikely that this great difference was produced by the audio-lingual approach alone. In other words, if we had used unprogramed reading material with the audio-lingual beginners we could have expected to destroy much of the direct association that had been built up by the time we taught them to read in the twelfth week of instruction.

2. The new words or expressions must be spaced as evenly as possible. If several new words must be introduced in a shorter space, there should be a compensating wider spread before another new item is introduced. A cluster of new words will tend to force the student to decode the entire passage into English equivalents — in other words, to translate.

3. The vocabulary must be as useful as possible. If the final goal of 5000 or more common words is to be achieved, the use of a word that has little chance of being repeated in other contexts is a luxury that cannot often be afforded. Synonyms are useful for glossing in the foreign language and they also offer stylistic advantages. However, they do not add to the story-telling power of the writer and should be used conservatively in the beginning when the writers need to add new concepts as rapidly as feasible.

4. Words that are obvious to the student need not be counted as new words, and will serve to bring the vocabulary forward more rapidly. For instance, true or reasonably true cognates and also loan words need not be regarded as new. However, they should be signaled by devices such as italics or asterisks as a part of the process of teaching the art of inference. Derived forms that are readily recognizable once the derivational system is known need not be counted against the formula. The presentation of derivational systems should begin as soon as there are enough examples to illustrate the patterns clearly. Names of places that are similar in the two languages and at the same time easily inferable from the context as being proper names can also be ignored in counting new words.

5. The language should be deliberately manipulated so as to set up as many inferential situations as possible. New words should be surrounded by contextual clues so that it is possible to infer the meaning. The student should be told not to refer to the glossary the moment a new word appears, but rather to try

to infer its meaning. He should be told that clues to meaning may be found not only before but also after the new word. He should also be told to tolerate a certain amount of nebulousness and to let subsequent encounters with the new word bring it into sharper focus. At the same time the teacher must be patient and accept a certain amount of vagueness. Awareness of meaning will develop in this way more readily if English equivalents are not called for, since it is possible for a student to grasp approximate meaning without being able to give an exact and complete English equivalent.

As for the step-by-step procedure as far as the grammar is concerned, this is actually an inherent characteristic of any teaching approach that uses large quantities of new-type structure drills rather than chiefly composition exercises. The substitution, expansion, and transformation drills provided throughout a unit are designed to activate the several new grammatical patterns, one at a time. It can be argued, of course, that a dialog or a series of basic sentences which may begin a new unit are the vehicles of far too much new material within relatively few lines to make them compatible with the principle of small steps that I have just outlined. This is certainly true if they are judged in isolation. But they cannot and must not be judged as entities. A dialog at the beginning of a new unit is there partly to give the drills that follow some psychological ties with meaningful content. The dialog is overlearned or even memorized – a feat with which youngsters have no real trouble – so that the drills that fix the new principles in new but related sentences can be mastered with comparative ease.

It is here perhaps that we find some of the most significant differences between audiolingual and traditional approaches to language teaching. If the exercises in our traditional grammars had been more carefully designed – if they had had stronger content ties with meaningful discourse; if they had provided far more drill on each new principle; and if they had offered immediate reinforcement to accompany the exercises, that is, self-testing – the two approaches would not look so dissimilar today, except for the different emphasis on oral and aural work.

Self-Testing The third requirement of programed instruction is that the student must be afforded the opportunity to test his mastery of each critical step as he proceeds. The most important area here is the lexical one. To the extent that it is feasible, each new word should be repeated two or three times as soon as possible after it is introduced. There are also other ways of achieving repetition. If a new word is glossed in the foreign language it can sometimes be repeated in the definition. Questions on the story can incorporate the new items. Other questions can be designed to elicit the new items, and if responses are provided, the desired practice with the new words will be assured. Words taught in basic sentences or dialogs preceding a reading selection should be repeated, of course, in the reading itself. In addition, new words should be repeated whenever possible in subsequent units.

There are some other ways in which self-testing and reinforcement take place. As a story unfolds, the reader is constantly indulging in a natural process of self-testing without any special aids. If the reading program is skillfully constructed, the reader will be successful in making direct associations, while at the same time reinforcing the previously learned material. Recombination readings – that is, readings in which only the familiar lexical and grammatical items are used to produce a new content – are particularly useful for the self-testing which leads to reinforcement.

The next type of self-testing and reinforcement is more artificial. It does not occur automatically, but it is stimulated by class procedures such as retelling the story or asking for answers to well-planned questions. Questions at the end of a story or chapter constitute a familiar method of testing responses. If suggested answers are also given, the student can check himself immediately, thus gaining the advantage of immediate rein-

forcement for a correct response. If his response is wrong, he can correct it immediately.

Another device is that of presenting questions in advance of the reading material. This prompts the reader on what to look for and tends to increase reading speed, especially if the question density is not too high. Care must be taken, however, that the students do not develop the habit of skimming to find only the answers to the questions.

The self-testing processes that have so far been mentioned are all directly linked only with the reading materials. There is an additional area of constant and effective self-testing and immediate reinforcement, namely, the pattern drills. Although they may offhand be thought of only in connection with oral-aural proficiency, their intimate relationship to reading proficiency can hardly be overestimated. This is especially true of the troublesome area of morphology. Pattern drills are the real key to bringing about automatic recognition of grammatical forms when the student turns to reading because every drill line is a test and every student response is followed by the correct answer. When presented on tape, these drills usually provide the student with the opportunity to repeat the correct answer after he hears the master voice. When used as a study device, the response to the drill line may be covered up, and as soon as the student has given his own response, either oral or written, he can immediately look at the correct response. Thus whether correlated tapes are used, or whether some other use is made of pattern drills, they are perhaps the most effective answer to the third requirement of programing, that is, self-testing with immediate correction or reinforcement.

CONSTRUCTION PROBLEMS

We have seen that it is possible to construct a reading program that can meet all of the basic requirements of "programed instruction" as it is understood today. It now remains to see how such a reading program must be built up, first through the construction of reading materials which introduce vocabulary and grammar at a rate which the student can handle, and then through the selection, sequencing, and editing of suitable material from the literature of the language.

A few teachers still feel that all of the structures should be taught in the first two years because some students surrender the course after two years. A portion of these students will face such problems as entrance examinations for college and actual articulation with second-year college courses. This is all very true. But it is also an established fact by now that one cannot do justice to all the skills and all the grammar in the first two years. If by a block-and-tackle method all of the grammar were pulled into a two-year sequence, the effect would be devastating as far as the building of the skills is concerned. There is a certain minimum of drill work needed to activate each grammatical point, and experience has clearly shown that at least three years are necessary to complete the work in high school. Two conditions would have to be met to make it possible to cover all of the grammar adequately in two years: (1) the language laboratory would have to be used as a library, that is, for some daily study outside of class hours; and (2) far more homework would have to be done than is now usually the case. Those teachers who can fulfill these two conditions may be able to cover one and one-half levels in each of the first two years. The others – the vast majority – ought to abandon the two-year strait jacket and forget the notion that students have completed anything after only two years of study. They haven't.

In making the materials that bring the vocabulary and structures forward to the point where original literature can be used, the matter of choice is constantly haunting the writers. Two questions are ever present: (1) Which of the common words are the most useful and will permit the earliest transition to

original selections? (2) Which of the structures are most important? The answers are best determined by first deciding on the earliest original selections to be used. By keeping a sharp eye on the lexical and grammatical features of these, the writers can steer a premeditated course into the first original selections.

Although some people object to adapting original works, it seems to be about the only way to build the bridge between contrived and liberated reading. Great care must be exercised, however, so as not to dilute content or to distort style to any disturbing degree. Collaboration between a cooperative professional writer and the textbook writers is one possible way of circumventing the practice of adapting. But there is little difference between compelling the professional writer to express his ideas in somewhat simplified language and having the textbook writer do it for him.

Experience has shown that it is quite feasible to make the transition to original texts with very little adapting and abridging somewhere near the 2000-word level and after about two-thirds of the structures have been taught. This point should come early in the third year of a four-year high school sequence. After the adapting of original works has begun in earnest, one of the most formidable tasks for the writers is that of building a substantial stockpile of selections that are closely compatible with all the requirements of the program. The writers become first of all talent scouts and secondly, adapters.

In adjusting the vocabulary of original selections, the programer substitutes known words for uncommon unknown words and tries to maintain an even spacing of new words. Where such spacing is impossible without extensive alteration of the text, he devises other ways of handling them, such as incorporating them in the basic preparatory section. As the student is brought closer to the point of liberated reading, it is probably safe to relax the rules of programing gradually. Substitutions are made for surplus or unusual constructions, and troublesome phrases or clauses are dropped or simplified. The remainder of the unknowns may be presented in a preparatory section preceding the reading selection, along with the excess vocabulary.

The reason for such concern about the programing of vocabulary and morphology, while letting syntax come along in a more or less haphazard fashion, is based on scientific evidence that word order is much less of a problem to the reader than new words and inflections. This was proven long ago (*Buswell, 1927*) and confirmed more recently (*Waterman, 1953*) in studies of eye movements in foreign-language reading. As long as the new lexical and morphological elements are learned systematically and directly, the reader's eyes move from left to right without any unusual regressions. The reading habits of direct readers are the same as those of native speakers.

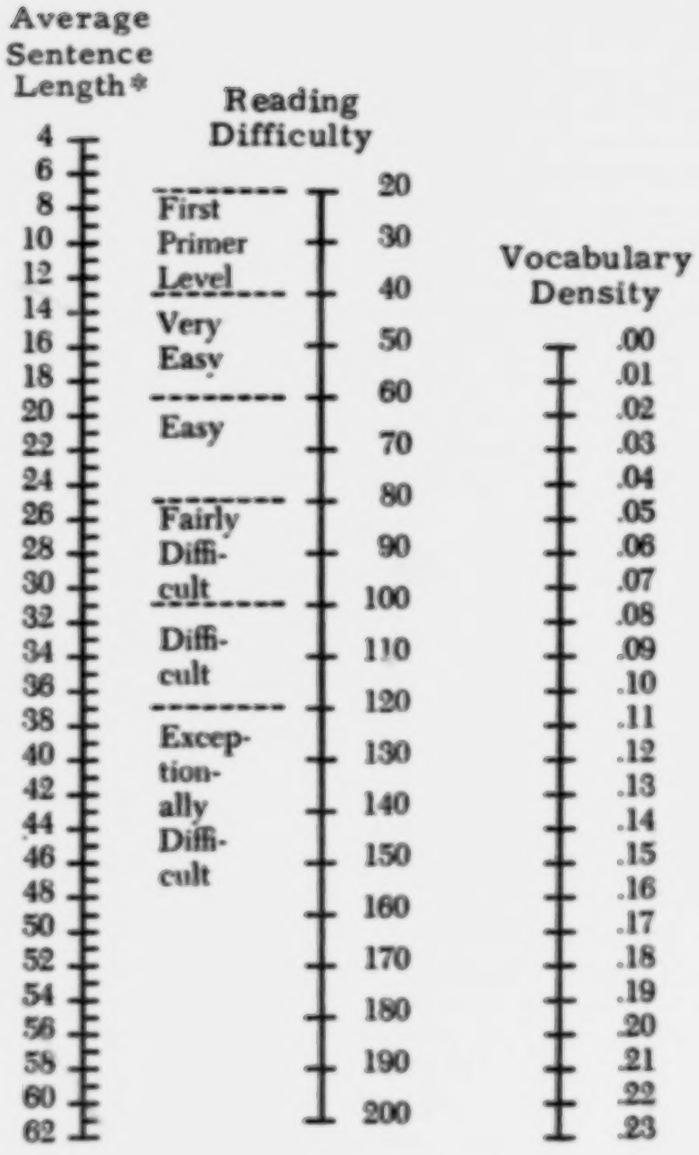
While we think of pattern drills as devices designed chiefly to drill morphology, actually they provide an enormous amount of practice in syntactical manipulation. A pronoun substitution drill in Spanish, for example, that poses in succession the problem of making the verb agree with ten different subject pronouns in scrambled order, is at the same time drilling an identical syntax pattern ten times in succession. In addition, of course, much use is made of transformation drills, such as directed dialog, and of expansion drills, such as adding adverbs to given sentences, all of which help to develop a strong sensitivity to contrastive patterns of word order. And since these drills are performed actively, it would indeed be amazing if word order should cause any difficulty in the passive activities of either reading or listening.

One of the serious problems the authors face is the proper sequencing of selections in accordance with lexical and structural difficulty. Long subordinate clauses in complex sentences are a strain on the memory span in foreign languages as well as in English. Therefore the stylists who write simply, with many short independent clauses and coordinating conjunctions, should be introduced

first. Judging this aspect of the material under consideration, as well as the matter of the density of new words, need not be entirely subjective. There are readability graphs that can be employed to measure structural and lexical difficulty. A very useful one, by Seth Spaulding, was first presented in 1951 to a meeting of the Central States Modern Language Teachers Association in Chicago (*Spaulding, 1956*).

The use of the graph is very simple: Count the new words of several 100-word passages in a potential selection and calculate the percentage of new words among the total running words. Next, count the number of independent clauses plus their dependents and calculate the average clause length. Then put a straightedge across the graph presented here and read the difficulty level on the middle scale. Of course, the graph will not reveal other aspects of difficulty, such as the level of abstraction or the degree of symbolism. For this there is nothing that can replace the sound subjective judgment of the experienced teacher.

READABILITY GRAPH



Adapted from Seth Spaulding. See Bibliography.

*Although Spaulding suggests the use of average *sentence* length, it is better for present purposes to use the average length of *independent clauses* (with their dependent elements). If this is done, however, the categories of readability, such as "easy," "difficult," etc., will automatically shrink somewhat, and "exceptionally difficult" will begin at a much lower numerical level on the center scale.

THE READING STAGES

It may be useful at this point to look at the problem of teaching reading in six successive stages from the very beginning to the point of complete liberation from an editor's help. For this purpose it is best to superimpose the stages of development upon a specific sequence in school. Let us therefore have a four-year sequence in high school, grades 9-12, serve as our frame of reference.

Reading stage I – the very first reading practice the student gets – follows a period of a number of weeks of audio-lingual, prereading instruction. The material read in stage I is the same material the student has practiced, overlearned, or memorized before he had any printed material whatsoever in his hands. It may include not only the basic preparatory materials, such as dialogs or basic sentences, but also the drills that accompany these. It should include specific exercises designed to establish the sound-letter correspondences of the language. It goes without saying that during this stage some writing is also practiced, not only for its own sake, but for the sake of reinforcing reading skill as well. As new units are learned audio-lingually they can in turn be introduced for reading purposes, so that this first stage in reading can be practiced until the end of the first semester or even longer.

Reading stage II introduces the student to selections especially written for reading practice. However, at this stage the selections employ only the known lexical and grammatical items, which are recombined into fresh content. The amount of such recombination reading may vary from a few short selections to quite a number of pages. One of the natural limitations is that the constructors of the materials understandably find it rather difficult to recombine the severely limited unknowns into new material that is of sufficient interest to excite the student. This kind of reading, however, need not be dropped completely after the next stage begins. It can profitably be offered at various points in the program. As the lexical and grammatical inventories are augmented with future units, recombination readings in larger quantity and of better quality are easier to produce.

Reading stage III is the reading of contrived materials for the purpose of introducing new elements, especially new vocabulary, in accordance with the principles of programed instruction previously outlined. It begins in the tenth grade and continues until the end of the year, perhaps even extending for a few weeks into the eleventh grade. Experience has shown that it is hardly possible to abandon this stage before the student controls a lexical inventory of 2000 or more words, and we also know that it requires at least all of grades 9 and 10 to teach 2000 words. There seems to be only one alternative to teaching the first 2000 or so words through materials especially contrived by the textbook writers. This is to over-adapt selections which happen to be fairly simple in their originally published form. However, such selections may not have much literary quality to begin with, and in drastic adaptation they will probably lose what little there was. A good textbook writer who is also a native speaker can usually do better on his own.

Reading stage IV is the stage during which adapted and/or abridged selections from the original published writings are employed. During this stage the vocabulary must be increased from about 2000 words to 5000 or more. The principles of programed instruction should continue to be followed during this stage. Although many of the new words can be taught through word-building studies and the practice of analogizing these, the task is more difficult than it seems because of the semantic range of words. Whenever a word has two or more distinct categories of meaning, the effect is the same as the addition of new words over the 5000 needed. The student must be constantly encouraged to use his power of inference to determine the meanings of unknowns, and the teacher must in turn

accept a tolerable degree of imprecision in this guesswork. Reading stage IV will occupy us for most of the eleventh grade and all but the last few weeks of the twelfth.

Reading stage V is reached when abridged and adapted texts are no longer necessary to maintain the basic principles of programed instruction. To be sure, an occasional violation of the rules may have to be committed if a policy of no abridgement and no adaptation is rigidly adhered to. In order to make this reading stage simulate liberated reading as closely as possible, the marginal glosses and the footnote helps ought to be omitted completely. This strategy also encourages guessing, which is needed as never before. Perhaps fifty or more pages of such reading ought to be included. Only two factors differentiate stage V from the final stage, which is liberated reading. The first is the factor of selection. The editors will naturally be much more calculating in selecting the material for this exercise than the student would be if he were sent to the library to select an unglossed title that may appeal to him. The second factor is the presence in the book of an end-vocabulary for emergencies. There is a great difference between consulting an especially prepared end-vocabulary and consulting a dictionary based on whole libraries of material in many kinds of literature.

Reading stage VI has arrived when the student can take an unadapted and unglossed book of moderate difficulty from the library shelf and read it for pleasure and profit and with direct association. He now has a large enough vocabulary to enable him to guess most of the unknowns. He has been liberated. For the rarer unknowns that will inevitably occur, and which he cannot possibly infer from the context, he will need a separate dictionary. At this point it should be possible for him to use a good monolingual dictionary instead of the usual bilingual type.

What I have just called stage VI and treated as the final stage could be considered in terms of two separate steps. A block of readings, following the block for stage V, could be included in the book for the twelfth grade without glossing the new words in the end-vocabulary. This final section of the text could be prefaced with a lesson on using the dictionary. A few of the new words from this nonglossed segment of the course, especially words whose meanings are hard to guess from their surrounding contexts, could become the words upon which the dictionary drills would focus. This would provide a realistic approach to the use of the dictionary in that the context, while not sufficient to make guessing possible, is still likely to be adequate to keep the student from selecting the wrong one of numerous dictionary meanings. The best definitions should, of course, be supplied in some way, so that the student is either corrected, if wrong, or reinforced, if right, without undue delay. If the drills are done in class, the teacher can supply the best choice in each case. At any rate, if the double step were initiated, stage VI would differ from V only in that the new words are omitted from the end-vocabulary. The factor of prejudiced selection by the editors would remain. Then, when the student selects his own unprepared title, he would actually be in what we might call *reading stage VII*. Even here, of course, he will not be making a completely free choice because the books in the school library will have been selected for their suitability for the age and ability level.

QUANTITY AND ATTRIBUTES

The number of pages of reading material required from the beginning of the adapting stage (stage IV) until liberated reading is reached will certainly not be fewer than 450 or 500. We must not forget that if the formula of one new word in every 35 running words is maintained, only about seven to eight new words per page can be taught. Thus 400 pages would provide for about 3000 new words. But many of the words learned with only one meaning will appear again with an entirely different one. As previously mentioned, this increases the number of *meanings* to be taught substantially above 3000. However, the estimated 400 pages will probably still suffice for two reasons: (1) We have economized throughout by not using up any lines of text to teach the obvious cognates, loan words, and derived forms. (2) The basic introductory material for each unit introduces a good many of the new words in concentrated fashion. It is therefore quite conceivable that about 400 pages of reading material will achieve the desired goal. If we then add the two blocks of 40 to 50 pages each during the final steps before complete liberation from the editors, we are dealing with a corpus of half a thousand pages.

Now this may seem like an impossible amount of material for the student to read and, even more so, for the teacher to teach. But upon due reflection it should become clear that this is not at all the case. In the first place, the kind of reading advocated here comes very close to reading in the native language. Certainly no English teacher need hesitate to assign several times 500 pages in the eleventh and twelfth grades combined. One reason that the foreign-language teacher should not attempt *more* than 500 pages in the last two years is that considerable time during the entire third year, and perhaps during the fourth, must be devoted to the grammar that remains after the first two years. A second reason is that the skills of speaking, listening, and writing continue to consume their share of the available time. Still a third reason is that the new vocabulary, although strictly controlled, is far more dense for the student than in his readings in English.

The fear that so much material is too much to teach is also unfounded, for it does not have to be taught in the usual sense. If the books are carefully constructed, the actual reading can readily be assigned as homework and need not usurp any class time at all, except for reading aloud to preserve the phonetic control which was developed long before. Much of the class time should, however, be given over to a treatment of the readings in foreign-language discussion. There can be no doubt that the students will be quite capable of engaging in this, and it is just as certain that the teacher is indispensable in this process. Stimulation toward active participation in the stream of speech requires leadership, and corrective work does too. The students will still be capable of error in pronunciation, in grammar, in choice of words, and in style.

So far I have said very little about the characteristics of the literary selections that should make up the large corpus of reading material needed from the beginning of adaptation early in grade 11 to the end of grade 12. It seems sensible first of all to concentrate on modern materials. If we can build a modern vocabulary of 5000 or more words, we will have given the boy or girl who surrenders his formal study of the language the best possible tool for further reading for pleasure or research. This also holds for modern structures. The student is most likely to want to deal with the present. If his research leads him into some older treatises he still has an effective tool.

On the other hand, the students who continue with the study of the language and embark upon a serious study of literature are also best served by a good control of the modern vocabulary and grammar. We can predict that all of these will do a considerable amount of reading in twentieth-century literature. I

would even like to propose a drastic innovation in the junior survey course which most of these students will enter as freshmen in college. Instead of giving the course in the traditional fashion by beginning with the oldest masterpieces and thereby plunging the students into archaic vocabulary, grammar, and style, let us offer the course in reverse chronological order. This procedure would provide a kind of additional step in the overall programing process in that it would lead rather gradually into the vocabulary, idiomatic expressions, and styles of the past.

As for the nature of the modern readings that might be included in the program, there are several important considerations to be noted. The material must be of interest to secondary school students, but it dare not offend the Humane Society or the PTA. It seems safe to say that the most suitable material is that which is true to life, presents modern characters, offers a lot of action, and makes generous use of suspense. The level of abstraction must be kept relatively low, especially until we are well into the twelfth grade. Therefore, the greatest works of modern literature are not necessarily the best choices.

In any event, premature attempts to deal with the best of literature as an art form, rather than using good literature as practice material to improve reading skill, will not produce the kind of literary appreciation desired. There is no point in jeopardizing the student's progress toward the level of reading proficiency that will eventually make the serious study of literature as literature possible and fully enjoyable. In other words, it is suggested here that the high school sequence should concentrate on the indispensable prerequisite to the profitable study of literature, namely, control of the language.

The literary genres incorporated into the program should certainly be varied. The modern short story is an excellent category to begin with. Cultural essays and various types of journalistic prose are in order as soon as the vocabulary permits it. Manageable poetry should be included. And somewhere the program should offer a short play and a novella or a short novel. The important thing always is that every selection reflect the culture of the country concerned, not only in terms of authentic language, but also with respect to content.

Basic textbooks have often included readings in English on the culture of the country in question. This makes for a very convenient source of such material. However, there are some practical reasons for not doing this. In the first place, every page devoted to English means one less page devoted to the foreign language; or every English page added means a higher price for the book. Secondly, class time devoted to the treatment of culture in English means less time for practice in the foreign language. Thirdly, there is a vast supply of cultural readings in English available. It would seem practical to purchase the material for the school library and use it as collateral readings. Written reports could be required or the material could be discussed in class in the foreign language, but it does not seem justifiable to take class time for English discussion of these. Much of this material is available in paperbacks and a rather sizable collection of different titles can be purchased for much less than the total of extra cost that English readings would add to every student copy of the basic text. Finally, programed reading will, in a long sequence, lead to the point where cultural readings *in the foreign language* can readily be incorporated in the basic text.

CLOSING STATEMENT

In conclusion, I must confess that some of what I have said is still theoretical and may not work out exactly as predicted when it comes to practical applications. However, I feel that we should have a theoretical system before progress in a practical system can be fully realized. Some reading materials fashioned according to the theoretical notions I have offered are already at the level of practical and functioning reality. We are in the middle of a language-teaching revolution. May it bring the results we all want!

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